**5.1 Area between two curves**

**Set up (don’t solve) the integral that gives the area between the two curves. Also, sketch the region bound by the two curves. Use a graphing calculator if needed.**

1. 2.

3.

**These integrals represent the area between two functions. Sketch that area. Try not to use a calculator.**

4. 5.

**Find the area of the region bounded by each set of curves. Use a calculator if needed.**

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| --- | --- | --- |
| 6. | 7. | 8. |

9. Suppose two graphs intersect at 3 points, but the area can be found with a single integral. Explain how this can be so.

10. Explain why the area between cannot be found with a single integral. Explain how you could use symmetry to find this area with a single integral.